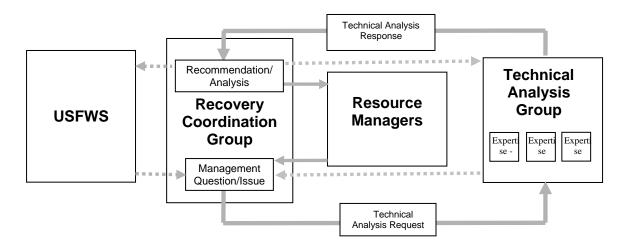
## CHANNEL ISLAND FOX INTEGRATED RECOVERY IMPLEMENTATION TEAM

On March 5, 2004 the Channel Island Fox of Santa Cruz, Santa Rosa, San Miguel and Santa Catalina Islands were federally listed as endangered species. Within a week of listing, the Manager of the California/Nevada Operations (CNO) office of the United States Fish and Wildlife Service (USFWS), the Director of California Fish and Game (CDFG), the Regional Director of the National Park Service (NPS), and the Director of The Nature Conservancy's California Chapter (TNC) met on Santa Cruz Island to discuss conservation needs of the Island Fox. This group subsequently committed to developing a coordinated recovery implementation strategy. The USFWS CNO requested the formation of an entity that would serve as an interface with the resource managers and technical experts that, in that capacity, would help identify key management questions, collect and synthesize technical information and propose management recommendations in a timely manner.

In response to that request, participants developed the concept of a "Channel Island Fox Integrated Recovery Implementation Team". It formalizes the dynamic interaction and communication between four key groups: a Technical Analysis Group comprised of Technical Expertise Groups, the Resource Managers, a Recovery Coordination Group, and the USFWS CNO. The Team's structure is intended not only to streamline the delivery of technical expertise to Resource Managers but also to institutionalize a recovery approach that is transparent, credible, and responsive. The Team is established pursuant to section 4(1) of the Endangered Species Act.

## Channel Island Fox Integrated Recovery Implementation Team



**Figure 1.** Proposed structure and formal communication flow of the Channel Island Fox Integrated Recovery Implementation Team.

## **Structure**

The Channel Island Fox Integrated Recovery Implementation Team (*Team*) is comprised of four groups:

The **Technical Analysis Group** is an *ad-hoc* community of technical experts representing the diverse array of disciplines necessary for management and recovery of island fox populations. The Technical Analysis Group draws upon the talents of the existing Island Fox Conservation Working Group, as well as other experts not currently involved. The community of experts is organized into disciplinary and geographic *Technical Expertise Groups*. Thus, the Technical Analysis Group structure effectively replaces the existing Fox Conservation Working Group structure. The Technical Analysis Group is responsible for responding to Technical Analysis Requests from the Recovery Coordination Group (described below), with scientific analysis and management recommendations. Written responses and recommendations are presented in a standardized format back to the Recovery Coordination Group.

A roster of Technical Analysis Group members (plus contact information and area of expertise/research interest) is maintained by the Facilitator of the Recovery Coordination Group. The Facilitator for the Recovery Coordination Group also supports formal communication among the Technical Expertise Group Chairs.

Members of the Technical Analysis Group self-select into broad thematic Technical Expertise Groups (see Table 1). Technical Analysis Group members may participate in multiple expertise groups where appropriate. Each expertise group elects a chairperson. The expertise group chair is responsible for communicating with the Recovery Coordination Group via the Facilitator and for helping the Recovery Coordination Group assemble the teams necessary to respond to specific Technical Analysis Requests. This team is called the Technical Analysis Working Group (Working Group) for that particular Request. The Recovery Coordination Group makes specific recommendations of the disciplines to be represented on and/or persons to be appointed to Working Group. The chairs work together to assemble the Working Group that will best address the Technical Analysis Request. A Working Group is comprised of individuals representing the diversity of expertise necessary to address the Request (and so may be comprised of members from several Technical Expertise Groups). Working Groups are limited to those that can dedicate the attention necessary to complete the task. Once assembled, the Working Groups respond to Technical Analysis Requests, addressing specific scientific and management challenges (see Table 2). The Technical Analysis Working Group selects a Lead, who is responsible for ensuring that the Technical Analysis Request is responded to in full, and delivered to the Recovery Coordination Group within the specified timeframe.

Technical Expertise Group Chairs and Working Group Leads may not sit on the Recovery Coordination Group. Resource Managers may not serve as a Expertise Group Chair or Working Group Lead, but may serve as a member of a Expertise Group or Working Group. Service contractors to the Resource Managers and others with financial conflicts of interests may not serve as a Expertise Group Chair or Working Group Lead.

Resource Managers represent the institutions involved with the daily management of the island fox and the resources on which it depends, e.g., the National Park Service, The Nature Conservancy, the Catalina Island Conservancy (CIC), and the United States Navy (USN). The responsibilities of the managers include identifying key management challenges, communicating those challenges to the Recovery Coordination Group and making management decisions considering the Recovery Coordination Group's recommendations. The Resource Managers are those individuals from the institutions that are responsible for executing recovery actions.

The Recovery Coordination Group (RCG) consists of ten individuals, including senior personnel from the managing institutions or regulatory agencies (i.e., NPS, TNC, USFWS, CDFG, and CIC), and four recognized scientific experts (e.g., in canid biology, captive breeding and reintroduction, population viability analysis for small populations). The RCG is staffed by a Facilitator (a USFWS employee) that provides communications support for the RCG, and the Team at large. Members of this group must be able to dedicate necessary time and attention to ongoing fox recovery issues and participate in regular (perhaps quarterly) meetings. Appointments to the RCG are at the invitation of the USFWS CNO. All representatives should be skilled at integrating sound scientific data/analysis with management responsibilities. Each agency nominates individual(s) to the CNO manager for appointment to the RCG. The CNO manager makes the final appointments. Appointment to this group precludes eligibility for Technical Expertise Group Chairperson or for Technical Analysis Working Group Lead.

The responsibility of the Recovery Coordination Group is: to receive major management questions (*Issues*) from Team members; to frame those Issues as Technical Analysis Requests to support overall recovery goals (*Goals*, Table 3); to identify the expertise necessary to address the Requests; and to deliver them to the corresponding Technical Expertise Group Chairs, with an appropriate timeline and with recommendations for individuals to staff the Working Group. Subsequently, the RCG: receives the analysis and recommendations (Technical Analysis Response) from the responding Technical Analysis Working Group; reviews the recommendation(s); endorses, modifies, or rejects specific recommendations based on scientific, financial, political feasibility, or other criteria; and, provides a written justification for modifying or rejecting recommendations. That written response is provided back to the Technical Analysis Group, USFWS, and Resource Managers. Accepted recommendations are delivered to the Resource Managers.

The **USFWS CNO** is engaged in monitoring the synthesis and implementation of recommendations, as well as the impact of recovery actions.

## **Process**

Further elaboration on the process by which the Team operates is outlined below:

**Informal Communication:** There will need to be considerable informal communication between all members of the Integrated Recovery Team – as well as with the broader academic, agency, NGO, and stakeholder communities.

**Formal Communication:** The success of the Integrated Recovery Team depends upon transparent and credible processing of information, as well as clear and timely internal and external communication. Formal communication (*Figure 1*) must facilitate information flow within and among groups, and leave a clear administrative record.

**Issues:** Management questions, issues, or problems facing the managers of island foxes are posed to the Recovery Coordination Group by the Resource Managers, the USFWS or other members of the Team. Issues are sent in written form to the Facilitator.

Technical Analysis Requests: Technical Analysis Requests are formulated by the RCG from the Issues and delivered to the Technical Expertise GroupChairs representing the disciplines needed to address the issue. Technical Analysis Requests are generally management questions or issues faced by Resource Managers. Note: It is not expected that every management action will be processed by the full Team as Technical Analysis Requests/Responses. Rather, the process outlined here addresses major management program plans and actions. An outcome of a Technical Analysis Request, for example, may be structured guidance for decision making (e.g. for prioritizing golden eagle capture efforts, for selecting captive foxes for experimental release, etc.) or a general plan (e.g., for establishing a mainland captive breeding facility, for developing a vaccination program).

Generation of Technical Analysis Requests: Most typically, Issues are presented in written (e.g., email) form to the RCG, via the Facilitator, by the Resource Managers. Issues may also be presented directly from the members of the RCG, the Technical Analysis Group, or the scientific/stakeholder community at large. The Facilitator has the responsibility of compiling Issue statements, and disseminating them to the RCG. The RCG meets quarterly (or as needed) to discuss the Issues. The RCG will review the current Issues, and those that warrant further analysis by technical experts will be formulated as Technical Analysis Requests. Thus the RCG ensures that management questions forwarded to the Technical Analysis Group are well-framed and focused on priority issues. Some Issues may not need to be elevated to the Technical Analysis Group and may be addressed immediately by the RCG with recommendations going to Resource Managers. The RCG includes in the Technical Analysis Request recommendations for the expertise/individuals required to address the challenge. The Facilitator delivers the Technical Analysis Requests with its recommendations to the Technical Expertise Group Chairs and coordinates with them to expedite the formation of a Working Group. The Request includes a preferred deadline for delivery of response/recommendations.

**Processing of Technical Analysis Requests and Formation of Technical Analysis Working Groups:** The Technical Expertise Group Chairs receive the Technical Analysis Request from the RCG Facilitator. The Chairs are responsible for assembling representatives of their respective disciplines to participate in the Working Group to address the Technical Analysis Request. Two weeks from the receipt of the Technical

Analysis Request, the Expertise Group Chairs submit to the Facilitator a list of individuals that have agreed to collaborate on the Technical Analysis Request. Recommendations for modification of subgroup membership may be offered at that time (e.g., to ensure adequate diversity and representation of expertise). The Working Group then nominates a Lead, who is responsible for delivering a Response to the Technical Analysis Request within the allotted timeframe.

**Format of Technical Analysis Response:** Responses to Technical Analysis Requests must be written, and include a restatement of the Technical Analysis Request, an executive summary including main findings and recommendations, names and affiliations of Working Group members, an introduction, analysis, presentation of alternatives, preferred alternatives with rationale, recommendations, and literature cited. The Working Group Lead submits the Response to the RCG Facilitator.

**Processing of Technical Analysis Request Responses:** The RCG Facilitator disseminates the Response to the RCG. The RCG reviews the recommendations/analysis and make recommendations to the Resource Managers for action/implementation. The RCG, via the Facilitator, disseminates written comments on the Response, notably those not accepted as recommendations for implementation. The Response and the RCG's recommendations are forwarded to the appropriate Resource Managers, the USFWS, and the Technical Expertise Group Chairs.

Processing of the Recommendations of the Recovery Coordination Group: The appropriate Resource Manager should respond back to the RCG within two weeks, in writing, acknowledging receipt of the recommendations and outlining their management intent. The Resource Managers are not bound to implement the recommendations of the RCG. However, if they do not implement those actions, or if they modify them significantly, an explanation should be provided in the response to the Facilitator explaining why implementing the recommendations is not warranted.

**Development of a Formal Recovery Plan:** Facilitator coordinates the drafting of a formal recovery plan from existing recovery plans, taking care to include all listed subspecies.